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What is claimed is:

1. A reusable polymeric sponge or foam for the detoxification of a diverse array of organophosphorus and/or organosulfur compounds comprising a plurality of enzymes or a cross-linked enzyme complex of said plurality of enzymes immobilized on the sponge or foam, said plurality of enzymes comprising multiple-enzymes selected from the group consisting of acetylcholinesterase (AChE), butyrylcholinesterase (BChE), triesterase, pseudocholinesterase, choline oxidase, peroxidase, organophosphate hydrolase (OPH), phosphotriesterase, paraoxonase, and laccase and an indicator embedded in the sponge or foam for measuring the capacity of the sponge or foam for detoxification of organophosphorus and/or organosulfur compounds, wherein the indicator is fluorescent, chemiluminescent or visible chromogen or is an electrode, and said indicator is encapsulated in a liposome or is in a crushable packet.

2. The polymeric sponge or foam of claim 1 wherein the sponge or foam comprises polyurethane.

3. The polymeric sponge or foam of claim 1 further comprising carbon embedded or integrated on or in the sponge or foam.

4. The polymeric sponge or foam of claim 1 further comprising a reactivation compound, material or device.

5. The polymeric sponge or foam of claim 4 wherein said reactivation compound, material or device comprises 1-(2-hydroxy iminomethyl-1-pyridium-1-(4-carboxyaminopyrididinium)-dimethyl ether hydrochloride (HI-6), N,N-trimethylene bispyridinium-4-aldoxime dibromide (TMB4), or mono or bisquaternary.

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6. The polymeric sponge or foam of claim 1 wherein said polymeric sponge or foam is color-coded.

7. A kit for the detoxification of an array of organophosphorus and/or organosulfur compound comprising the polymeric sponge or foam of claim 1 and a compound or compounds for enzyme reactivation selected from the group consisting of 1-(2-hydroxy iminomethyl-1-pyridium-1-(4-carboxyaminopyrididinium)-dimethyl ether hydrochloride (HI-6), N,N-trimethylene bispyridinium-4-aldoxime dibromide (TMB4) and mono or bisquaternary oximes.

8. The polymeric sponge or foam of claim 1 wherein said plurality of enzymes are organophosphate hydrolase (OPH) and either acetylcholinesterase (AChE) or butyrylcholinesterase (BChE).

9. A method of reactivating the polymeric sponge or foam of claim 1 comprising contacting said polymeric sponge or foam with at least one compound selected from the group consisting of: 1-(2-hydroxy iminomethyl-1-pyridium-1-(4-carboxyaminopyrididinium)-dimethyl ether hydrochloride (HI-6), N,N-trimethylene bispyridinium-4-aldoxime dibromide (TMB4) and mono or bisquaternary oximes.

10. A method for decontaminating a surface where one or more organophosphorus and/or organosulfur compounds may be present comprising contacting the surface with the polymeric sponge or foam of claim 1.

11. The method of claim 10 further comprising measuring the capacity of the sponge or foam for detoxification of the organophosphorus and/or organosulfur compounds.

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